SCIENTIFIC AMERICAN.

THE ADVOCATE OF INDUSTRY AND ENTERPRISE, AND JOURNAL OF MECHANICAL AND OTHER IMPROVEMENTS.

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THE SCIENTIFIC AMERICAN,
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(The Principal Office being at New York,)

By RUFUS PORTER.

Each number of this paper is furnished with from two to five ORIGINAL ENGRAVINGS, many of them elegant, and illustrative of NEW INVENTIONS, SCIENTIFIC PRINCIPLES, and CURIOSITIES; and contains as much Interesting Intelligence as six ordinary daily papers, consisting of notices of the progress of Mechanical and other Scientific Improvements,—American and Foreign Inventions Catalogues of American Patents,—Scientific Essays, illustrative of the principles of the Sciences of MECHANICS, CHEMISTRY, and ARCHITECTURE;—Instruction in various Arts and Trades;—Curious Philosophical Expements;—Miscellaneous Intelligence, Poetry and, occasionally, Music.

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TERMS OF ADVERTISING.—For 10 lines, or less, 50 cents for the first, and 12 1-2 cents for every subsequent nsertion.

My Cousin's Visit to the Nail Works.

TUNE—Padd'y Wedding.

Say, have you seen a nail machine?
'Tis all the people's wonder, O;
It thumps away both night and day.
And makes a noise like thunder O.
The cranks and cams, and battering rams,
Do keep such pelting, pouncing O,
That all the ground is shook around,
By reason of the jouncing O.

Now you must know that I'd a lot of cousins, that "comed all the way down from Varmount to larn the fashions, and to see and hear all the cute and curious thingumajigs." "By golly," says Zachary Diggins, "I insign to see the nail works, if it costs me my fire-ball colt. Uncle Fife told me as how they had ten thousand rattle traps, and kept a tarnation sort of a

Rattlety bang and clatterty clang,
And rattlety, clatterty bang they go."

So off we sett with Tom and Bet,
Young Stephen Bump and Dolly O,
And Jo and Josh, and Billy Magosh,
Ned Shacklefoot the jolly O,
And Susan Judd, and 'Mina Nudd,
(They rode behind on pilions O,)
And Sarah Slack—they made such a clack,
You'd thought they were a million O.

We scampered along through mud and mire quite in the style of the fashionables, till we were brought up, all standing, before the nail works, and were soon escorted very genteely into the very midst of this great establishment, when out squealed cousin Betty Diggins, as loud as a shriek owl, "O, the wonderation, what a nation sight of jiggermarees!" "Yes, faith," says Ned, "and as thick as seven bumblebees in a punkin blow." Now all this was a very delightful accompaniment to the *effetuoso* of the whirling machinery, as it very delicately touched off its

Rattlety bang, and clatterty clang
And rattlety, clatterty bang we go.

Then up went Jo, who thought as how
He'd like to try the riggle O,
But all his jerks and awkward quirks
Soon set them in a giggle O.
"Poh, Jo, you coot," says Shacklefoot,
"You'd better come to halting O,
And stop the noise of these rude boys
By paying of the malting O."

By the way, it has been slanderously reported that some of the pretty girls got a little fuddled withal; but, mind ye, I'll never be hanged for defamation. All I can tell ye about the matter is, that it set the de'il into their slippery tongues, whose confounded gibberjabber outrattled and drowned the deep tonation of the machinery, with their everlasting

Clickity clack, and lickity whack,
And whickity, clickity clack we go.

Then came the clark, a brisk young spark,
All bowing to each lady O;
And questions all, both great and small,
To answer he was ready, O;
The girls were pleased, for them he squeezed,
(They hardly could deny him O,)
But Sarah Slack, she got a smack,
Unless they did belie her O.

This little bit of an animal, the clerk, was a sort of a would be dandy; having the bottom of his waist pinched up to the size of a pint pot, and thus resembling in shape what we call a mud wasp. O, these dear sweet creatures are always vastly attentive to the ladies. They may be easily distinguished from other animals by the above description, and their singular gait, which is a sort of a

Tippity bob, and hippity hob,
O, I am all the tippity—O!'

So round we went with minds intent
On all this mighty working O,
'Twas tarnal queer, such wond'rous geer
And O, such jams and jerking O!
"But come," says Tom, "let's strike for home,
To-night you know's the dancing O,"
"O yes," cried Zach, if we go back,
It's time we were a prancing O."

So each lad of us took his lass, and then in comely mode we all departed. It was, however, thought by most of the ladies, that Mr. Tippy showed too much attention to Miss Sary Slack, considering that Miss Saray was no better—and to be sure I will say no worse—than the rest of them. But all hard thoughts and hard words, were soon dissipated by the frolic and fun on the road, as we jovially drove home with

Merrily, ho! whisp dobbins, ge O,
Galloping gaily and cherrily, O.

Then home we got by gallop and trot,
In season for the junket, O,
And there was Sam, and Katy Cram,
And cousin David Plunket, O.
Now hark, around the cheering sound
Of Peg and Pere's scraping, O!
In merry plight we spend the night
In frolicking and capering, O.

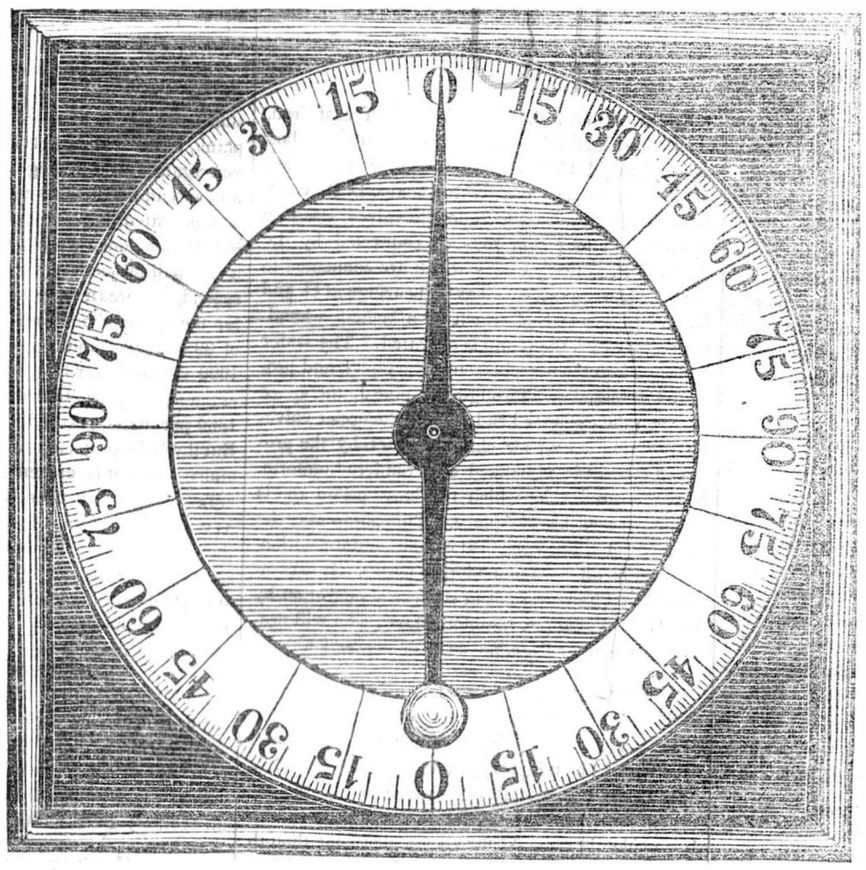
Now as this was probably the last time we should all be together under such pleasant circumstances, we were resolved to keep it up till the cows come home, as cousin Himly said. And to be sure so we did right merrily, with "hunt the slipper," Jack on the green," "Jo Bunker," &c. Here, however, was none of your dandy pigeon wings, shaw-shees, or rigermadoons, but the good old-fashioned

Rigglety bump, and shuffily thump,
And shufflety, scufflety clump, we go!

FARMING IN GREAT BRITAIN.—A London paper states that at the present moment, 'with an area of 61,522,970 arable acres in the United Kingdom, there is only one proprietor for every 305 acres.—The 'stout yeoman' class is rapidly disappearing; the number of persons farming their own land every day diminishes; a dozen properties are run together into the hands of one holder; three or four small farms are combined into one large one; the small farmer is now an animal almost as rare as the small landlord; and the children of those who constitute the former tenantry of the country have become the laborers on the very land their ancestors cultivated as holders. Farming, like all other trades, is becomeing a wholesale business, and while a few are becoming extensive and wealthy agriculturists, the mass are sinking into hopeless poverty.'

EXPENSES OF BRITISH CHINA.—The Hong Kong Gazette complains that the expenses of that colony and of the five British consular ports in China, are exhorbitant. The whole civil expense of the colony (no military expenses being included) is £48,739, and of the consular establishment $31,515—making a total, say of $400,000. The salary of the Governor of Hong Kong is $30,000, Colonial Secretary and Treasurer, $15,000 each, Chief Justice and law courts, $30,000 besides fines, which the Gazette says are no trifle; Police 30,000, contingent expenses $80,000, &c. The consular establishment is monstrous. The salary of the Chief Superintendent (an office which appears to be a sinecure) is $20,000, Consul at Canton $25,000, and Consuls at Amoy, Foo-chow, Ning-po and Shanghai, $20,000 each.

THE PLUMB AND LEVEL INDICATOR.



INTRODUCTION.—Every carpenter, mason, brick-layer and mill-wright will readily appreciate the utility of a more ready method of ascertaining the position of grounds, walls and timbers, than by the use of the spirit level or plumb line in combination with a bevel and scale. We believe the instrument above represented, is new; at least we have neither seen nor heard of, anything of the kind, though we must admit that it is a wonder that something of the kind has not been both invented and brought into general use long before this.

EXPLANATION.—This "indicator" consists of a square frame 8 to 12 inches in diameter, and within which is a circular plate dial divided at its periphery into 360 degrees, and each quadrant of the circle being marked to indicate the degrees from 0 to 90. In the centre of the circle is a delicate axle-pin on which is mounted an index needle, terminating at one end in a metallic ball. This dial-plate may be made of glass that the index may be seen from either side; but it will be generally preferable to make them of brass or wood, with a plate of glass in front for the preservation of the dial. It will be understood that the proper position of the instrument, is vertical, and that the weight of the ball will keep the index in a perpendicular position; so that either the bottom or the side of the frame being placed against a horizontal, vertical, or oblique surface, the index will readily indicate whatever variation there may be, from a perpendicular or a horizontal line. The inventor has put in progress measures for securing a patent, and the instruments will be readiy for sale in a few weeks, at one to two dollars each, according to size.

TELLING A GHOST STORY.—Prince Belloselsky possessed, in an eminent degree, the talent of telling a ghost story. At a large party one evening, the ladies drew their chairs around him, and exclaimed, 'Do, Prince, terrify us a little!' Upon this the Prince ordered the lights to be extinguished, with the exception of one, which was left burning in the adjoining apartment, the door of which remained ajar. The narrator commenced his tale, which turned, as might be expected, upon the apparition of a horrid phantom advancing slowly, in the midst of darkness visible, towards a person in bed. For the last ten minutes, the Prince had kept his hand extended on a marble table; his voice assumed a more sepulchral tone. All at once, he applied his icy hand to the bare arm of his hostess, who uttered a piercing scream. The terrified auditors rushed into the other room; and in their confusion, extinguished the solitary light. The sudden darkness redoubled their panic. At last the servants made their appearance with flambeaux; and the Prince who began to be alarmed at the success of his experiment, succeded, after some difficulty, in calming the apprehensions of his fair audience. 'Ladies,' said he, 'it's all your own fault: you requested me to terrify you a little, and I like to make myself agreeable.'

OPTICAL ILLUSION IN ARCHITECTURE.—Mr. J. J. Scholes, in a paper read at the Institute of British Architects, on the 23d ultimo, said—'It is well known to architects, that if the shafts of columns are made perfectly straight, that the effect to the eye would be an appearance of curving inwards; and this unpleasing effect is remedied by giving an entasis or swelling to the column. As Stuart and Revett had not shown any entasis to the columns of the Parthenon, I felt a desire, when I was at Athens, to ascertain if the architect of the Parthenon had overlooked this point, and if these columns were really executed without any entasis. I had the opportunity of measuring each diameter of the blocks of a fallen column, which clearly proved that an entasis was given, but so slightly as not to give any appearance of swelling out, which is so often seen in the buildings of Italy, but yet sufficient to correct the defect that would have been apparent if the shafts had had a straight line.—*The Builder.*

EXTRAORDINARY LONGEVITY.—Mr. Wm. Pridgen died in Balden, N. C., lately at the remarkable age of 123 years! He entered his 124th year in June 1845. The Fayetteville Observer says he volunteered to serve his country in the Continental army of the Revolution, and though then exempted by reason of his being over age, he served a full term in that war, and has received a pension for many years past. He has lived to follow all his children to the grave, except one, an aged daughter. His grandchilren are aged people, and he has left great grandchildren upwards of 40 years of age, and great great grandchildren about 12 years of age. He retained his faculties till his death, except his sight, which he lost a few years ago.

A LUCKY THOUGHT.—During ihe early part of the French invasion of Algiers—occupation, we believe, is the milder diplomatic term—a small party of the French troops fell into an Arab ambuscade, and those who were not immediately slain or taken prisoners, were obliged to place more trust in their heels than in their muskets. It happened that the regiment band was in the party, and the musicians made a retreat with the rest, in a prestissimo movement of the most rapid execution. The ophicleid player was, however, embarrassed by his instrument, and he was hesitating about carrying it further, when, happening to cast a Parthian glance behind, to his consternation he beheld an Arab horseman close on him. Further flight was useless;—there was nothing for it but to fight or surrender. Years of desert slavery made a gloomy prospect, and yet what could his side-sword avail against the spear of his pursuer? Desparation is the parent of many a strange resourse. The lately abused ophicleid was lifted to his shoulder, musket fashion, and the muzzle brought to cover his foe. The Arab was struck with panic; doubtless this was some new deviltry of those accursed Giaours; some machine of death, with a mouth big enough to sweep half his tribe into eternity. Not a second did he hesitate, but wheeling round, he galloped off at a pace that soon took him out of the reach of what he conceived to be the grandfather of all the muskets. Had Prospero been there to have treated him to a blast something between a volcano and a typhoon, that side of Mount Atlas would never have beheld him more. Our musician made his retreat good, with a higher opinion of the powers of his instrument than he ever before possessed; and the story was the amusement of the French army for many a day afterwards.

THE EXCAVATOR.—The great 'Lion' in these diggins, now a days, is the Excavator, in use upon the Northern Railroad, about a mile north of the old North Church. It is a curious and most ingenious combination of all the mechanical powers.—It goes by steam of course. At the end of a large beam, is a sort of a huge iron shovel,—which by means of pulleys and screws, &c., is brought to bear upon the soil, then the steam is put on, and it 'goes ahead,' till it is full, and then it stops, as it should. Then it is cunningly whirled round till it brought directly over a dirt cart, into which it empties itself in short metre. The car being filled is quickly moved away, and another takes its place, and so on indefinitely. The way it digs into the 'bowels of the harmless earth,' is a caution.—*Concord Cour.*

VINEGAR FROM BEETS.—A farmer in Detroit says—'The last season I grated about a bushel of the sugar beet to a pulp, and pressed the juice therefrom, of which I obtained six gallons. I put the same in a vinegar barrel, which was entirely empty, and in less than two weeks I had as good and as pleasant vinegar as I ever obtained from cider, and was equally strong and clear.'

ALPHABETICAL LIST OF PATENTEES FOR 1845.

(Continued from No. 39.)

Charles Durfee, assignee of Edward S Townsend, Palmyra.
Jacob Zeigler Ecksteen, John and H D Moore, assignees, Philadelphia.
Josephus Echols, Columbus, Ga.
George W Eddy, Waterford, NY.
Lewis Edwards, Norwich, Conn.
Chas S Edwards, Rusevich Md.
Allen Eldred, Oppenheich NY.
John Elgar, Brookville.
James Elliott, Newark
E W Ellsworth, East Windsor, Conn.
Theodore Ely, New York.
John Ericsson, New York.
Garrett Erkson, Pittsburg.
Coleman C Estes, Maury county, Tenn.
Joshua Evered, Sodus, NY.
George Faber, Canton, O.
R & S Fairchild, Trumbull, Conn.
Joel Farnam, Stillwater, NY.
J T Ferrand, Port Byron.
Asa Fessenden, and Luke L Knight, Barre, Mass.
S F Finch and James Wheeler, Rootstown. O
Jesse Fitzgerald, New York.
L D Fleming, Newark.
E B Foster, Philadelphia.
H D Forbes, New York.
Joseph Francis, New York.
Kasson Frazer, Manlius, N Y.
Ferris Freleigh, Stow, Ohio.
Newall French.
John M French, assignee of Calvin Fulton, (design.)
Patrick Gallagher, Chambersburg, Pa.
James Garner, South Lee, Mass.
P G Gardiner, New York.
James P Gardiner, Columbia, Tenn.
John N Genin, New York.
David D Gibson and Walter Cobb, Damascoville, Ohio.
Samuel H Gilman, Boston.
J Golding.
Nelson Goodyear, Newtown, Conn.
Charles Goodyear, New Haven.
Daniel Gross, assignee of Joseph C Colt, New York,
Wm R Goulding, New York.
Isaac T Grant, Schaghticoke, NY.
Royal C Grant, Perrysboy, O.
Thomas F Griffith, New Market, Md.
Wm C Grimes, Baltimore.
Henry N Gros.
Solomon Guess, Boston.
Harrison Hagans, Brandonville, Va.
Luke Hale, Hollis, NH.
Warren Hale and A Goodman, Dana, Mass.
Augustus Haman, Washington.
David B W Hard, Bethlehem, Conn.
Robert Hare, M D, Philadelphia.
Charles Harivel, Baton Rouge.
Frederick W Harris, Lancaster, Mass.
Daniel Harrington, Philadelphia.
David Harrington, German Flats, NY.
John Harrison.
Almond Harrison, Blissfield, Mich.
Silas Hart, New Haven, NY.
John Hatch, Attleborough, Mass.
John Haw, Hanover county, Va.
Joseph Hawkins, West Windsor N J.
Wade Haworth, Dayton, Ohio.
Hezekiah Haynes, Middletown, Vt.
Benj Haywood, Pottsville, Pa.
F L Heddenberg, New York.
Richard Hemming, Boston.
I S Hill and J Dixon, Boston.
Chas S Hine, (design) New York.
Holmes Hinkley, Boston.
Henry Hizer, Wooster, Ohio.
Richard M Hoe, New York.
Horatio Hoskins, Scipio, N Y.
Andrew Hood, New York.
Andrew Hosmer, Bath, Ohio.
Charles Horst, New Orleans.
S B Howd, Worcester.
John J Howe, Arcadia, NY.
Horatio Hubbell, Moyamensing, Pa.
Walter Hunt, New York.
Joseph S L Hunt, Boston.
Hosea Huntley, Rochester.
John Huntington, Zanesville O.
Thaddeus Hyatt, New York.
N P Isaacs, and J Raisbeck, New York.
Henry Isham, Montpelier, Vt.
Joseph Ives, Bristol Conn.
G W Jackson.
Jaggar, Treadwell & Perry, assignees of Ezra Ripley (design) Troy.
Adrian James, New York.
Elihu H Jaques, Springfield, Vt.
Nathan B Jewett, Worcester.
Elias Johnson and David B Cox, Troy.
Johnson, Geer, & Cox, assignees of Ezra Ripley, (design), Troy.
Elias Jones, Amsterdam, NY.
James Jones, Galway, NY.
Henry C Jones, Newark.
Gilman Joslin, (design) Boston.
Henry Katussowski, and F P Weizbicki, N York.
Andrew Kayser, Fulton, Mo.
Edwin Keith, Bridgewater, Mass.
Jacques Keller, assignee of Daniel Pfister, Switzerland.
John F Kimball, Kennebunk, Maine.
Thomas H King, New York.
John L Kingsley, New York.
Rhodolphus Kingsley, Springfield, Mass.
J C Kneeland, Troy.
E A Knowlton, Columbia, S C.
William Laighton, Portsmouth, N H.
Thomas S Lambert, Utica.
Israel Lamborn, Marshallton, Pa.
D Lardner and James Davidson, New York.
F L Law and J S Leake, Albany.
James Leffel, Springfield, O.

(To be continued.)

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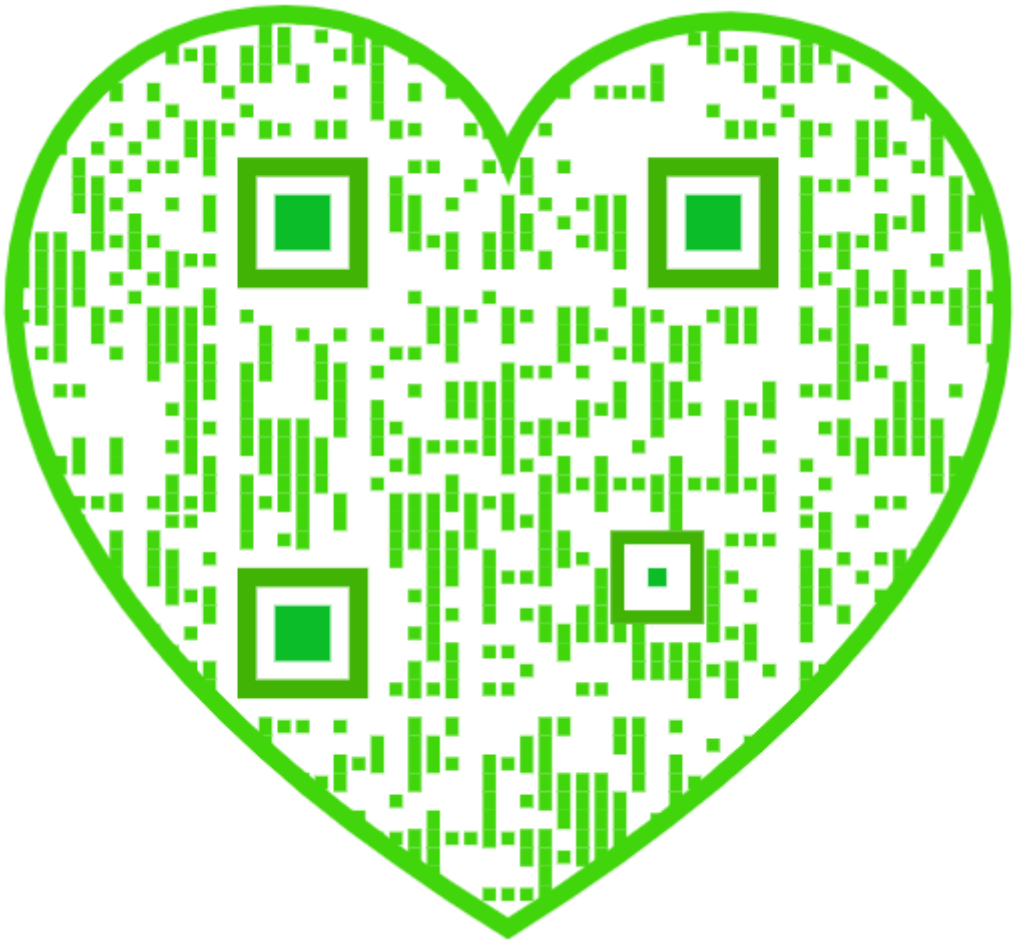
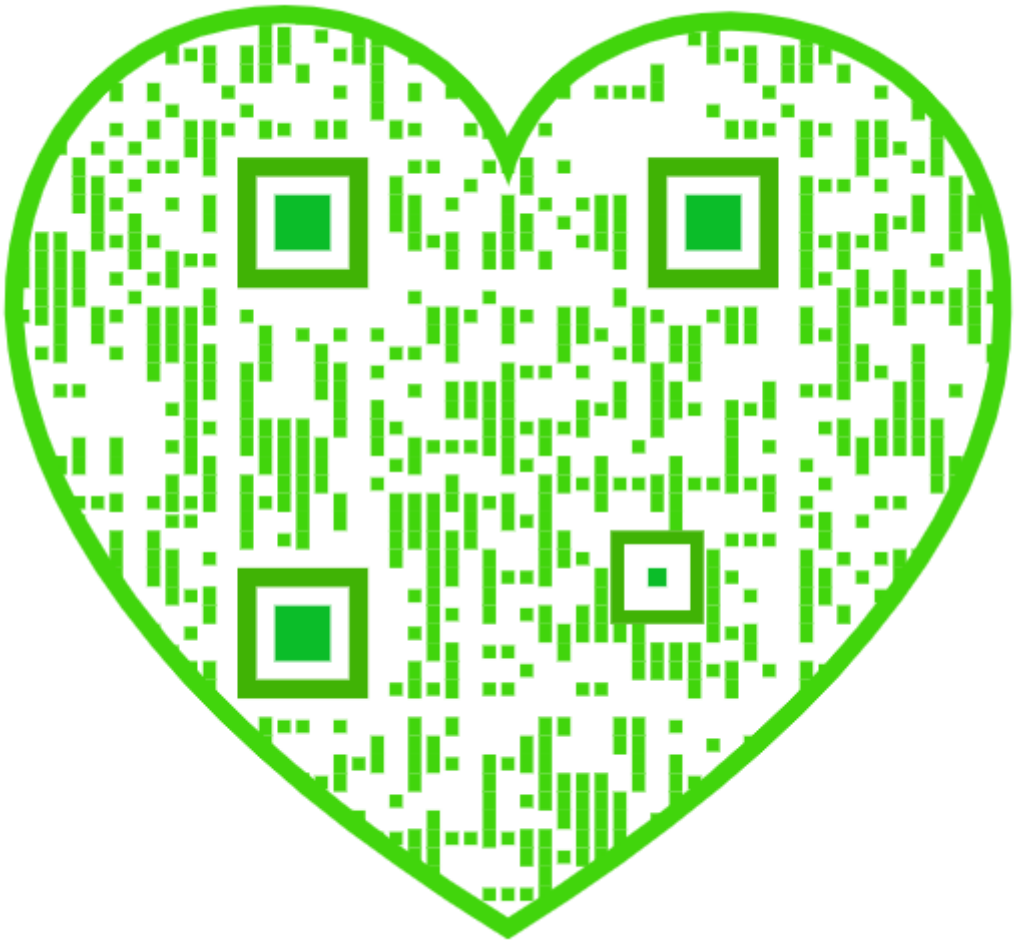




SCIENTIFIC AMERICAN

NEW-YORK, THURSDAY, JUNE 25.

To Correspondents.—We have been compelled to neglet for some time the favors of correspondents communicating new inventions, &c., but shall take time to fetch up arrears immediately. Press of business is our excuse.

Drawings of machinery, engraving on wood, and lithographic drawings, neatly executed, at the lowest prices, at this office.

Post Masters—Who receive this paper, will confer a special favor by mentioning the subject occasionally to scientific mechanics.

The Terrible Smasher.—We are pleased to observe that our excellent neighbor of the 'Farmer and Mechanic' is disposed to treat with a rational degree of ridicule the outrageously extravagant representations put forth in semi-humbug papers, concerning pretended new inventions, of which we give the following as a specimen, remarking by request, however, that the invention spoken of is *not* that of Mr. Rosevelt mentioned in this paper several weeks since:—

Infernal Machine!—The whole mode of naval warfare changed!!—The combined fleets of all nations blown into fragments by a simple operation of mechanical science!!!—One of our enterprising young men has invented a machine which is called '*The Leviathan*,' for the purpose of destroying the vessels of an enemy in the time of war. It moves from 10 to 15 miles per hour, far below the surface of the ocean. Not a ripple is seen on the water, as it approaches the vessel doomed to destruction.—No warning is given. No moving, living thing, may be within the bounds of the horison. In a moment—'in the twinkling of an eye'—the work of destruction is accomplished, and the strongest vessel on the ocean is scattered in ten thousand fragments. All on board must inevitably perish. In a moment, the 'Leviathan,' insatiable as the 'Giant of Terrors,' is on its way to another object of its destruction.

After copying the foregoing from the New York Express, with some prefatory remarks, the F. & M. adds—'How lucky for England that the *pacific* policy is likely to prevail. What else could have saved her proud navies from being shivered into "fragments?"'

Collapsable Color Tubes.—We have frequently seen and admired the excellent metallic tubes for holding artist's colors, but had not until recently learned that they were the invention of our particular friend John Rand, who has for some few years resided in England. These tubes are made of thin plate of pure banca tin, with a small tube at one end, through which the ready ground and prepared colors may be expressed at any time, in quantities to suit convenience, by collapsing the bottom or lower part of the tube, and that without the admission of the least quantity of air to the interior. We are happy to learn that Mr. Rand has made himself comfortably independent by this and some other inventions, and consequently does not give much attention to the art of portrait painting.

From the Germantown Gazette.

Our good friend of the Scientific American will have it that our sheet is called "Germantown *Telegraph*," instead of *Gazette*. Although it is quite a compliment, yet we prefer being called by our right name. The "Germantown Telegraph" is published in Germantown, *Pa.*, and is, we confess, in every respect, a better paper than ours.—*Germantown Gaz.*

We can not fully agree with the "Germantown Gazette" in giving the Telegraph the preference, although the title of the latter had become the most familiar with us. But that we may avoid errors in future, we will practice a little on the subject by copying an item or two with due credit to the "Germantown Gazette."

The Legislature of Louisiana passed a resolution appropriating $500 for the purchase of a sword, to be presented to Gen. Taylor, for and in behalf of the State.—*Germantown Gaz.*

"Still Another.—We cannot refrain from expressing our thanks for another cake sent us by the Misses Sarah Emrich, Caroline Emrich, and Catharine Loy, which being ornamented with beautiful flowers, tastefully——" O there, now, Mr. Germantown Gazette, if that is the way you receive cake from three beautiful young ladies at the same time, and are disposed to tantalize your brother eds by publishing your good fortune, we just let you know we shan't copy another word of it—credit or no credit—that's all.

Great Discoveries of Copper.—The Detroit Advertiser publishes an extract from a letter which states that the Eagle Harbor Mining Company have struck on a mass of pure copper, which they have uncovered to the extent of 50 feet, and have struck the mass again 36 feet in advance of that. The body of copper is two feet and a half wide, but its depth has not been ascertained. Such success must have the effect to reduce the price of copper materially.

New Mode of Growing Melons.—A gentleman in Cincinnati has succeeded in effecting the rapid production of melons, by planting the seeds on the sides of a mound of earth, on the top of which is placed a headless barrel filled with manure. The bottom of the barrel is pressed a few inches into the ground, and in dry weather, a few pails of water are poured upon the manure, which ensures the constant and rapid growth of the vines. The same method may be equally advantageous to other vines.

Who has lost Clothing.—Four or five weeks since, some persons left at this office, a parcel of linen and other clothing, apparently recently from the laundress. The owner has probably forgotten where he left it, but if this meets his eye, he may claim the property by letter, and it will be promptly forwarded.

Arts and Trades.

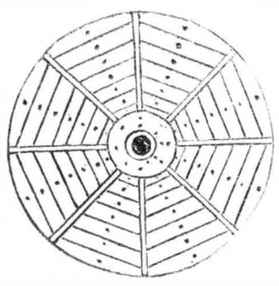
Lithographic Printing.—When the lithographic stone and drawing are prepared, as described in No. 37, it is placed horizontally on a table, with the face up, and a sponge moistened with water, is passed over the face of the stone. An ink-roller of the ordinary construction is then passed over the stone, and the ink thereof readily adheres to the drawing, but is prevented by the moisture from taking to the uncolored surface. A sheet of paper is then laid on the drawing, and over this a piece of leather, stretched on a frame, and so secured as to prevent its sliding on the stone. A strip of mahogany board being reduced on one side to a thin round edge, is placed, with the edge down, across one end of the leather, and is being firmly pressed down is moved over the surface thereof, thus pressing every part of the surface in its progress, hard upon the stone, by which process the paper receives a full impression from the inked drawing. This however, is but a rude process, and lithographers are generally furnished with a convenient lithographic press, on which, by the motion of a crank, the stone and leather are made to pass under the mahogany *scraper*, which is adjusted to the surface by means of screws, &c. An ordinary drawing will work 8,000 or 10,000 fair impressions.

The Peculiar Properties of Cast Steel.—A Baltimore mechanic communicates an incident, a knowledge of which may be of service to smiths in general. It is a common impression that when a piece of cast steel becomes *burnt*, by neglect when n the fire, it is rendered coarse, brittle and useless. But in the instance referred to, a piece of cast steel, which was being wrought into fine cutlery, became badly burnt, and supposed to be spoiled. But the workman, without any apparent motive, tapped the steel lightly while at a white heat, and when it had cooled down a little, he quenched it in water. He then heated it to only a bright red, and hammered it till the red had nearly disappeared, and again quenched it. After repeating this two or three times, he examined the grain and the temper, and found it completely restored, and capable of being wrought into the finest blades.

Tempering Steel.—Mr. Oldham, printing engineer of the Bank of England, who has had great experience in the treatment of steel for dies and mills, says that, for hardening it, the fire should never be heated above the redness of sealing wax, and kept at that pitch for a sufficient time. On taking it out he hardens it by plunging it, not in water, but in olive oil, or rather naptha, previously heated to 200 degs. Faht. It is kept immersed only till the ebullition ceases, then instantly transferred into cold spring water, and kept there till quite cold. By this treatment the tools come out perfectly clean, and as hard as it is possible to make cast steel, while they are perfectly free from cracks, flaws, or twist.

Science of Mechanics.

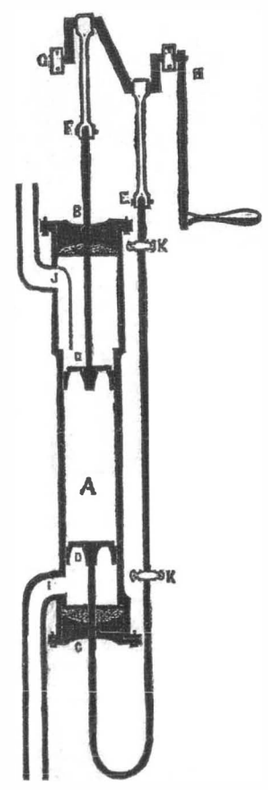
(Continued from No. 39.)



Propelling Wheels.—Agreeable to promise, we shall proceed to propose some of the most rational plans of improvements in the mode of propelling vessels, according to our views of the subject. The cut at the head of this article, represents a paddle-wheel that is planked up close at the sides, from the centre to the periphery. The paddles should also extend nearly to the shaft, that the water may not rise over them. The paddle-boards should be thin,—in no case more than an inch and a quarter thick; and should be made nearly sharp at the outward edges. Should they be made of plate iron, which is better, they may be placed very near together,—not more than 12 to 16 inches apart,—thus avoiding the unpleasant rumbling occasioned by the plunging of the thick, uncouth and awkward paddle planks which are used on ordinary propelling wheels. There is no advantage derived from using wheels so large in diameter as many of those in general use; there is much more power lost by atmospheric resistance, than there is gained by the more favorable position in which the paddles of a large wheel dip in the water. Twenty feet in diameter is a better size for a wheel than thirty feet, even for the largest class of steamboats, unless they are expected to encounter a rough and heavy sea, in which case there may be some advantage in a larger wheel. It is a demonstrable fact, that the atmospheric resistance, on some of the largest size of paddle-wheels, when in operation, amounts to more than 20 horse-powers! This resistance will be much reduced by having the wheel planked up close as above described; because in this case the same air will travel round and round with the wheel, without much resistance; whereas, in the common wheel, leaving its space to be occupied by a fresh quantity, the inertia of which must in its turn be overcome, and thus a constant resistance is exerted against the paddles of the wheel. The Errickson, or other spiral propellers, may be convenient for merchant vessels in a rough sea; but no propeller which applies an oblique surface to the water, and which moves in a direction at right angles with the direction and course of the vessel, can possibly apply more than one half of the power of the engine, to the propelling of the vessel forward. Several have proposed, and even attempted to propel vessels by drawing water from the bows and discharging it at the stern. This plan can never succeed unless the channel is direct, and the water is driven directly and continuously through, without being retarded or checked in its progress, by cavities, or chambers. We shall conclude our remarks on this subject with an expression of the conviction that no mode of propelling can readily be found, equal to the close, thin-floated paddle-wheel.

New Inventions.

Talbot's Double Acting Pump.



Explanation.—The barrel A is of cast iron, about three inches in diameter, with a stuffing-box and follower, B C, at each end, and through which the piston rods pass to the valve-boxes, D D. Each valve-box is furnished with double valves, opening upwards, The piston rods are connected by the joints, E F, to two pitmans which are connected to the double crank, which has its bearings at G and H, and to one end of which is attached a hand-crank, by which the pump is operated. The water is drawn into the barrel through the pipe I, and projected or forced out through the pipe J, the space between the cylinder head, B, and the upper valve-box, serving as an air chamber whereby the projected current is equalized and rendered uniform. K K are guides by which the long piston rod is supported and kept in place. This pump may be operated in either a vertical or horizontal position, and can be afforded at moderate prices. It was invented and has been put in successful operation by Mr. L. T. Talbot, of Taunton, Mass., who will procure a patent for the same as soon as practicable.

A Copper Boat.—A new kind of boat made entirely of copper plate, has been recently constructed at the Novelty Iron Works, of this city. A specimen boat 23 feet in length and five in width, has been made of four sheets of copper, and on an excellent model for running freely through the water. It is evidently stronger than a wooden boat, though not so heavy; and is said to have been pressed into its present shape in forty minutes. We see no reason why similar boats may not be made of a single sheet of either copper or iron, though the apparatus for making them would be rather expensive. It is well understood that boats of copper or iron, may be furnished with buoyant thwarts and tanks to secure them against sinking even when filled with water.

A Fence Machine.—The Cincinnati Union speaks of a machine in successful operation in that city, for preparing timber for bannister fences for yards, gardens, or farmers' fields. No description of the machine is given, but the turning and boring is said to be done with wonderful facility, and the cost of elegant fence is much reduced by the invention. We happen to know something on the subject of fence-making by machinery, and shall take up the subject in a few days, and give a description of some excellent machinery for that purpose, but which will be free to the use of the public.

Tin-plated Lead Pipe.—An important improvement has recently been introduced into the manufacture of lead pipe. It consists in tinning over the inner surface, so that the lead shall not be at all exposed to the action of the water or other liquid which may pass through it. Lead, it is well known, is a poison of a most destructive character, and nearly all waters, in passing through lead pipes, more or less corrode the lead and become poisonous. It is well-known, however, that tin is very little liable to the action of water or even acids, and is, moreover, harmless when corroded. Hence the value of this article as a coating for water pipes.

"The Tailor's Transfer."—This is the name of a new instrument for taking a correct measurement of persons for fitting them with garments, on a new system, called the "Tranfer System," invented by Mr. W. R. Acton, of Virginia. Both the instrument and the system are highly spoken of by those who have examined them, and are likely to come into extensive use.

Improved Press.—Mr. John Lightburn of Missouri has taken measures to secure a patent on a new press, adapted to the pressing of hay, cotton, or hemp. We have not been furnished with a full description of this improvement, but are informed that it is operated on the double-lever principle, and works with great facility.

Dancing Legs.—It is stated in an exchange paper that a Mr. Palmer, of Meridith, N. H., manufactures artificial legs which possess all the elasticity and freedom which belong to a natural limb. We should recommend to certain dancing masters to furnish themselves with a few extra sets of these legs for the use of their pupils on exhibition evenings.

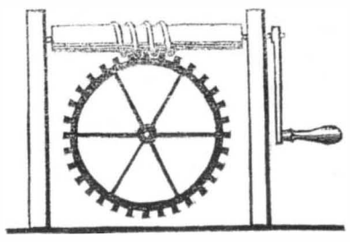
A Proper Exception.—Gen. Taylor on taking possession of Matamoras, allowed the business of the city to continue, and trade in all articles *except* ardent spirits.

New War Engine.

Under this head the "New York News," published some time since, an exciting notice of an engine, or machine, by which bullets are projected by the rotary motion of a wheel: and as we find the article is being extensively copied by other papers, we shall offer a few remarks on the article and the subject thereof. This machine is said to have been invented by Messrs. Reynolds & Brothers, of Kinderhook. We know not how *new* the invention may be, but the subject of projecting balls by *centrifugal force*, has been frequently before the public for the last ten years, though it is very probable that the Messrs. Reynolds have brought the subject somewhat nearer to perfection than has been done before. The plan of operation is to put a wheel—either horizontal or vertical, though the latter should be preferred,—into rapid motion, and by means of a peculiar arrangement, to pass a succession of bullets into the wheel, at or near its centre, and allow them to escape at its periphery, whereby they will have acquired a velocity equal to that of the periphery of the wheel; and being restricted from escaping except at one regulateable point their direction may be very accurately controlled. But with regard to its power in operation, some of the statements in the article alluded to, are worthy of notice: for the time has, or should have been passed, in which the American public should be gulled and misled by newspaper statements, palpably at variance with the first principles of the science of mechanics. It is stated, in substance, that "with the exertion of two men at a crank," twenty six 1½ ounce balls per second, are projected with sufficient force to drive the balls through a two inch plank, at the distance of 150 yards; and when driven against an iron target, the balls were flattened and spread out to the size of a dollar." We have demonstrated, in a former number, that to project a ball of one ounce weight with the ordinary force of a rifle ball projected by gunpowder, or 1000 feet per second, requires a force equal to 1000 lbs. continued for the space of one foot: of course the projection of 33 balls per minute, would be equal to raising 1000 lbs. 33 feet, which is equal to one horse-power; and the projection of 26 balls per second, or 1560 per minue, would require 47 horse-powers. But the balls projected by this machine being 1½ ounce balls, it is evident that the two men at the cranks must work upwards of 75 horse-powers!! We have nothing to say against the excellence of the invention, but this brief illustration will serve to show with how much regard for rational principles, statements are made on the subject of mechanical inventions, by some editors, whose only motive is to produce excitement for effect.

Portable India-rubber Bridge.—Messrs. Rider & Brothers, of Harlem, have secured an order for materials for a portable bridge for the army. It is to consist of a series of buoyant pontons, made of rubber cloth or canvas, and can be extended over an ordinary river without delay.

Mechanical Movement.



The Screw Wheel.—This movement is sometimes, though improperly termed the 'endless screw.' It consists in part of a screw, the thread of which takes to the teeth of a wheel, of which the direction of the axle is at right angles with that of the screw shaft. It is often used where the motion of the second shaft is required to be greatly reduced, and where there is little regard to friction. This movement has sometimes been reversed, so that the screw receives motion from the wheel; but the extent of friction in this case, renders it nearly useless.

Another Theatre Burnt.—Whatever may be said of the danger of railroad and steamboat travelling, there are abundance of facts to prove that there is more danger in visiting theatres than on board either cars or steamboats. The unfortunate city of Quebec is again in mourning over the loss, by the horrible death of burning, of 60 or 70 of her citizens, by the burning of a theatre in which they were assembled. The calamity was occasioned by the simple accident of upsetting a camphene lamp, and as usual in such cases, the door-ways were instantly choked up, so that none could get out and none could help, while the rushing flames were curling about them. There is not a theatre in New York from which one half of a full audience could escape, in case of a sudden conflagration.

Where's the Schoolmaster.—An English hostler, attending one of our livery stables, sent the following bill to a gentleman who put up at the Marsion House, the other day.

Mr——

To George Hoffman, Dr.

To hosafada.	26 pence.
Agetinonimome	1 shilling.

Which, when translated, means, a horse half a day—and getting him home.

A Lapland Season.—The following is the manner in which they hurry up their cakes in Lapland: June 22d, snow melts; July 1st, snow gone; 16th, fields quite green; 17th, plants at full growth;—25th plants in full flower; Aug 2d, fruits ripe; 10th, plants shed their seed; 18th, snow. The remainder of the year, we suppose, is made up of darkness, snoring, tobacco, and northern lghts.

Mexico.—A beautiful pamphlet of 64 pages, entitle 'Mexico; its Geography; its People, and its Institution,' with a map containing the result of the latest explorations by Fremont and others, by T. J. Farnum, has been published and is for sale by H. Long & Brothers, 32 Ann st; New York.

Variety

It is reported that the Mexicans, having lost their supper on the day of the last battle, and having no rations served to them for four days afterwards, refused to defend Matamors against the victorious Americans.

There are in Connecticut 137 cotton mills, 123 woollen mills, 37 paper mills, 323 coach and wagon factories, and 32 clock factories. Sewing silk is also manufactured to the amount of $173,000 per annum.

The business on the Norwich and Worcester railroad is walking up handsomely: the receipts for the month of May amounted to upwards of $20,000. There is "no mistake" about the location of this road.

The postmaster at New Orleans has made arrangements for the conveyance of a regular mail between that city and the army of Gen. Taylor in Mexico, to accommodate the army.

Charles J. Faulkner, Esq., of Berkeley Co., Virginia, has offered 150 acres of Texas land to every volunteer from that county, who shall serve for one year in the war against Mexico.

The steamboat Viola lately carried down the Ohio 150 tons of cannon, consisting of twenty guns of a size to carry 56lb. balls. They are supposed to be destined for Texas, or perhaps Mexico.

Several clergymen are reported to have volunteered from the Western States, to fight the Mexicans; one of them, a Methodist clergyman named Cleghorn, from Alabama, officiates as fifer.

Gen. Vega expresses himself as being extremely well satisfied with his position, and says he feels as if he were among friends, rather than as a prisoner of war. Ae cannot converse in English.

The "Louisville (Ky.) Legion," consisting of seven hundred and twenty men, embarked on the 22d ult. for the seat of war. Their absence must produce a melancholy vacancy in Louisville.

There is said to be a great rush of gamblers and pickpockets to New Orleans, to pick up their share of the money paid by the Government, to soldiers, seamen and others. They must look sharp.

It has been ascertained that the alloy called *gun metal* is capable of sustaining fifty per cent. more weight without being crushed than wrought iron.—It is also stronger on a draught.

A machine for kiln drying corn has been put in successful operation at Toledo, O., and will dry sixty bushels per hour. The Toledo Blade speaks highly of the invention.

There is a beautiful running rose which abounds in Michigan, and is sometimes known to grow 80 feet in one season. It climbs large trees, decorating them with a profusion of flowers.

It has been ascertained that about forty thousand baskets, equal to 800 bushels of strawberries, are brought into the markets and consumed in the city of New York daily.

It may be satisfactory to our readers to know for certainty that the treaty between England ond the United States, on the Oregon question, has been ratified and permanently settled.

The Hendrik Hudson recently made the passage from New York to Albany—making two landings by the way—in 7½ hours. Her speed on some part of the distance was 22 miles per hour.

The Baltimore Sun recommends as the most ready and effectual method of raising an army for the defence of Washington, that the President announce a few vacancies in any of the departments.

Electrical attraction was first discovered in amber, which being rubbed acquires the property of attracting light bodies. The Greek name for amber being *electron*, this attraction was called *electricity*.

Hon. Rice Garland is about to establish a line of stage coaches between Point Isabelle and Matamoras. It is thonght he will make a fortune by the monopoly of the route.

A Philadelphia paper attributes the frequent heavy rains to the telegraph wires on the New York and Baltimore lines. It would be quite as rational to attribute them to mesmerism.

Mexico is reported to contain at least three thousand mines, from which more gold and silver have been produced than in all the world besides, and which now produce $25,000,000 per annum.

It is estimated that the milk brought to this city, via the Erie Railroad, averages 28,500 quarts per day: and the freight of this article alone amounts to about $1000 per week.

The first child baptized in the new Trinity Church, in this city, was baptized with water brought from the river Jordan, by Dr. Dekay, in 1830. A rare instance of superstition.

Mrs. Trimble, lady of the late John Trimble, of Frankfort Ky., has been appointed by *Judge Kinkaid* as Clerk of the Carter Circuit Court, in place of her deceased husband.

A bill has passed the Connecticut Legislature, granting to the New York and Boston Railroad Company the right to build a bridge with an 80 feet draw, over the Connecticut river at Middletown.

The Reading (Pa.) Railroad Company have a large number of workmen employed in preparing the grounds and erecting a spacious freight depot in North 8th street, Reading.

'Husband,' said Mrs. Caudle, 'I can't imagine where that child got such a bad temder—not from me I'm sure.' 'No my dear,' replied Caudle, 'for I don't perceive that you have lost any.'

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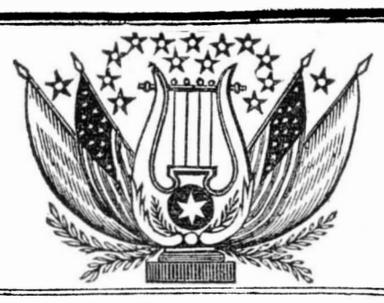


The Value of labor.

Ho, ye who at the anvil toil,
And strike the sounding blow,
Where from the burning iron's breast
The sparks fly to and fro,
While answering to the hammer's ring,
And fires intenser glow—
Oh, while ye feel 'tis hard to toil
And sweat the long day through,
Remember it is harder still
To have no work to do.

Ho, ye who till the stubborn soil,
Whose hard hands guide the plow,
Who bend beneath the summer's sun,
With burning cheek and brow—
Ye deem the curse still clings to earth
From olden time till now,'
But while ye feel 'tis hard to toil
And labor all day through,
Remember it is harder still
To have no work to do.

Ho, ye who plow the sea's blue field—
Who ride the restless wave,
Beneath whose gallant vessel's keel
There lies a yawning grave,
Around whose bark the wintry winds
Like fiends of fury rave—
Oh, while ye feel 'tis hard to toil
And labor long hours through,
Remember it is harder still
To have no work to do.

Ho, ye upon whose fevered cheeks
The hectic glow is bright,
Whose mental toil wears out the day
And half the weary night,
Who labor for the souls of men,
Champions of truth and right—
Although you feel your toil is hard,
E'en with this glorious view,
Remember it is harder still
To have no work to do.

Ho, all who labor—all who strive!
Ye wield a lofty power,
Do with your might, do with your strength,
Fill every golden hour!
The glorious privilege to do
Is man's most noble dower.
Oh, to your birthright and yourselves,
To your own souls, be true!
A weary wretched life is theirs,
Who have no work to do.

The Orphan Boy.

Stay, lady, stay, for mercy's sake,
And hear a helpless orphan's tale!
Ah, sure my looks must pity wake—
'Tis want that makes my cheek so pale!
Yet I was once a mother's pride,
And my brave father's hope and joy;
But in the Nile's proud fight he died,
And I am now an Orphan Boy.

Poor foolish child! how pleased was I,
When news of Nelson's victory came,
Along the crowded streets to fly,
And see the lighted windows flame!
To force me home my mother sought,
She could not bear to see my joy,
For with my father's life 'twas bought,
And made me a poor Orphan Boy.

The people's shouts were long and loud;
My mother, shuddering, closed her ears;
"Rejoice! rejoice!" still cried the crowd;
My mother answer'd with her tears.
"Why are you crying, thus," said I,
"While others laugh and shout with joy?"
She kiss'd me, and with such a sigh!
She call'd me her poor Orphan Boy.

"What is an orphan boy?" I cried,
As in her face I look'd and smiled;
My mother through her tears replied,
"You'll know too soon, ill-fated child!"
And now they've toll'd my mother's knell,
And I'm no more a parent's joy;
O lady—I have learnt too well——
What 'tis to be an Orphan Boy.

Oh! were I by your bounty fed—
Nay, gentle lady, do not chide;
Trust me, I mean to earn my bread;
The sailor's orphan boy has pride.
Lady, you weep!—Ha!—this to me?
You'll give me clothing, food, employ?
Look down, dear parents! look and see
Your happy, happy Orphan Boy.

Wanted by all.

I want a kind and tender heart,
For others' wants to feel;
A soul secure from Fortune's dart,
And bosom armed with steel,
To bear Divine chastisement's rod,
And, mingling in my plan,
Submission to the Will of God,
With charity to man.

POLYGAMY.—An *attractive* and gay fellow has lately been subjected to trial in Boston, for no other crime than having married Lucy Ann Jones of New Haven, Sarah T. Ormond in Boston, and Georgiana Williams, in New York, all three of whom appeared in court when he was arraigned. We have not learned the result of the trial, but hope the penalty will be nothing more than hard labor between stone walls during his natural life—and nothing less.

A COMPLIMENT.—The London Standard, speaking of manufacturers, say that nearly all the recent mechanical contrivances introduced into the English factories, for dispensing with human labor, are of American invention.

Jumble.

John Smith has said many good things, and among the rest, that a "newspaper is like a wife, because every man ought to have one of his own."——The circumference of the city of London, is nearly thirty miles from east to west, and seven and a half from north to south.——Either oak or spruce timber is stronger than iron, in proportion to the weight thereof.——A man who gets through the world without a kick, may rest assured that he is generally considered not worth minding.——A lady's heart is said to be like a fiddle—because it is played on to the best advantage by a *beau*.——The report that the new comets can be seen with "good glasses" is denied by a person who says he took six glasses on purposes to see the comets, but *only saw stars*.——We have heard of a political paper, which was published by Messrs. *Moon & Gunn*: it prospered well till Moon *changed* his politics and then Gunn *went off*, leaving Moon in *full* possession.——A dandy in Hartford got dreadfully frightened, lately, and fled across the street, at seeing his waggish companion apply a lighted cigar, to a keg of *onion seed*.—Said a loafer, "I went to *bed last night* upon a bench, about two o'clock this morning, and *slept out* in the open air *all night*, and was so cold I couldn't go to sleep.——"Sambo, are you afraid of work?" "Bress you, massa, I no 'fraid ob work, I'll lie down and go asleep by him side."——There is said to be an old fellow in High street, who snores so loud that he can't sleep in the same room with himself.——"Be-*ware*," as the potter said to the clay. "I'll be *burnt* if I do," as the clay replied to the potter.——On a tavern sign in Pittsburg, was painted a row-galley, which eventually gave the name to the street on which it was situated, and it still bears the name of *Rogue-Alley*.——"The Fair Sex: the jack-screw of the United States, and the wheel-horse of all creation," was the toast given by a wagoner, at a public dinner.——"Just before ye did, ye didn't, did ye dear?" said a toper, when his wife made a fruitless attempt to snatch his bottle from him.——If you want knowledge, read the newspapers: not merely one, but several: when business presses be diligent: when your wife scolds, hold your tongue.——There is a town in Maine, called Randum. The inhabitants live very much at *Randum*, and the parson preaches at *Randum*, every Sabbath.——Said Sam to Dick, 'you have a hole in your trowsers.' 'Who cares,' says Dick, 'it will wear twice as long as a patch.' 'Yes,' says Sam, 'and twice as *wide*, too.'——"I am *averse* to your new song," said a loafer to a new poet. "Indeed!" replied the poet, "I did not know that my song had such a dirty *verse* in it."——The 4th of July is expected to happen on the first sixth day after the first second day of the 7th month.——"Did it rain to-morrow?" inquired a Dutchman of a Frenchman. "Me guess it was," replied the Frenchman.——Potatoes eaten raw are said to be a remedy for the scurvy; and it has been remarked that none but a scurvy fellow would eat them.——It is said that divorced couples invariably like each other much better after being unyoked than they did before.——A reformed inebriate says he has drank nothing strong since the night in which he attempted to snuff his companion's nose across the table, mistaking it for the candle.——Two hundred and ever so many dogs had been killed in this city up to Saturday night, some time ago.

THE NIAGARA FALLS.—From a paper in Silliman's Journal, it appears that the motive power of the single cataract of Niagara would be sufficient to move all the artificial machinery on the earth. Yet, according to the present increase of population, and progress of improvements in the facilities of construction and transportation, it is not unreasonable to anticipate that this mammoth power may be broached upon, not to say used up, for manufacturing purposes within twenty-five years.

A WONDERFUL EGG.—The editor of the Boston Atlas has been presented with a penguin egg, which was found about two years since, in the island of Ichaboe, at the depth of fifty-eight feet below the surface, where it is supposed to have lain several thousand years. The egg appears to be sound, but can not be expected to be hatched in the Atlas office before the next presidential election.

EXPENSE OF FOLLY.—Fashion, according to the calculation of the London Court Journal, costs us something in this happy land of ours. That authority says that $500,000,000 are annually expended in the United States, for such articles of dress as are subject to the fluctuations of this fickle queen, more changeful than the moon. Out of the sum named it is computed that $16,000,000 are spent for the article of hats—about $20,000,000 for bonnets and caps, and other articles of fancy dress, not less than $4,000,000.

A HIGH SOUTHERN MOUNTAIN.—It has been stated in an exchange paper, that Mount Mitchel, in North Carolina, is the highest land in North America, east of the Rocky mountains; being 6470 feet above the level of the sea. If this is a fact, it should have been more generally known, as this mountain must afford a most delightful climate, and a refreshing place of resort in the sultry summer season, and a convenient place of refuge for those who are constrained to retire from the Southern cities during the prevalence of the heat of Summer.

NEGLIGENCE AT HEAD QUARTERS.—The New-Orleans papers complain of the tardiness of Government, or the Quartermaster's department, in furnishing the requisite funds for carrying on the Mexican war. Surely the Government has plenty of funds at command, and a negligence in this respect at such a crisis is highly censurable, and the fault should be traced to it proper source, and fully exposed to the public.

Has the Scientific American man volunteered? We have not seen his paper these three weeks.—*Norway Advertiser*.

Every number of our paper has been promptly sent all the way down to your house; but probably you was not at home.

Railroad Intelligence.

Several weeks having elapsed since we have found it convenient to accommodate this subject, it is possible that some of the following items will, to some people, be rather *old news*.

The bill for the charter of the Hudson River Railroad, as also that of the N. Y. and Erie Railroad, has been passed, and both companies are making arrangements for forwarding the work.

The Great Southern Railroad, extending from Savanna, Ga., to Vicksburg, on the Mississippi, has a fair prospect of completion. A bill has been passed to a third reading, in the U. S. Senate, to aid the State of Mississippi in the construction of this road from Jackson to the western boundary of Alabama. When this section is constructed, it will nearly complete a continuous chain from Portland, Me., to Vicksburg, a distance of about 1800 miles.

A meeting has recently been held at Ogdensburg for the purpose of organizing the Ogdensburg Railroad Company, and taking measures for the immediate construction of that road, which will complete the line of communication from Boston to Lake Ontario.

The section of the Connecticut River Railroad from Oxford Bridge (East Fairlee) to Well's River, Vt., is about to be put under contract. The extension of this road will evidently continue with steady progress till it reaches the St. Lawrence.

The receipts on the Western Railroad, for five months past, have exceeded those of the corresponding time last year, by more than $1000 per month.

The new and heavy rails—1500 tons—are prepared for the Housatonic Railroad and the contracts are made for laying them immediately. A double track is being laid on the Eastern Railroad from Boston to Salem. A double track is to be laid also on the Concord, N. H., Roilroad, as far as Nashua.

The Boston and Burlington, (Vt.) Railrood, via Fitchburg and Cheshire, is in fair progress, both in New Hampshire and Vermont; and is to be united with the Central Railroad, via Concord, at some point west of the Connecticut River.

The Central Railroad, in Pennsylvania, it appears, does not receive that encouragement from the Philadelphia capitalists that was expected when they were opposing the Baltimore and Ohio extension; but it will probably be carried through eventually, nevertheless.

A railroad from Salem, Mass., to Andover and Lowell, is expected to be commenced next Spring, if not earlier. Most of the stock has been already subscribed.

The Magnetic Telegraph.

We mentioned last week that communications had been made direct between Washington and Philadelphia; but we have since learned that our statement was too short,—that conversation has occurred direct between Washington and New York stations, as appears by the following from the Baltimore Patriot:—

A dramatic scene, such, I venture to say, as never had its parallel on this earth, occurred on Saturday evening last, 6th inst., and was the legitimate offspring of that strange invention, the magnetic telegraph, an invention to which the public attention is at this time so universally attracted. Prof. Morse, the inventor and superintendent of the magnetic telegraph, and his assistant Mr. Vail, in their office at Washington, wished to test the integrity of the telegraph line the whole distance through from Washington to New York, a distance of no less than 260 miles. The better to understand the singularity of the scene I am about to record, the reader must imagine four individuals, one at the office in Washington, one at Baltimore, 40 miles distant; one at Philadelphia, 108 miles farther, and one at New York, 112 miles farther.—The telegraph line passes through the instruments at the offices at each of these places, and a communication despatched from any one is written and understood instantly at all the others. I shall designate the operators by the names of the places at which they are stationed: Washington—Baltimore are you in connection with Philadelphia?—Baltimore.—Yes. Washington.—Put me in connection with Philadelphia. Baltemore.—Aye, aye, sir! Wait a minute. (After a pause.) Go ahead, you can now talk with Philadelphia. Washington. How do you do Philadelphia? Philadelphia.—Pretty well. Is that you, Washington? Washington.—Put me in connection with New York. Philadelphia.—Aye, aye; wait a minute. (After a pause.) Go ahead—now for it. Washington.—New York, how are you! (New York does not answer.) Philadelphia.—Hallo, New York, Washington is talking to you, hear him, why don't you answer? New York.—I don't get any thing from him. Washington.—I get that from New York.—Philadelphia.—New York! Washington says she gets that from you. Baltimore.—How is it that Washington hears from New York, and New York does not hear from Washington.

Philadelphia.—There's where I'm floored. Baltimore.—What is the reason Washington? Washington.—Baltimore, keep quiet; Philadelphia tell New York to ask me to write dots; (that is, to adjust his magnet.) Philadelphia.—Aye, aye, sir; wait a little. New York, ask Washington to write dots. New York.—Washington, write dots.—(Washington begins to write dots.) That's it. O. K. Now I have got you. Go ahead. Washington.—Do you now get what I send you? New York.—Aye, aye. Washington—Did you get Prof. Morse's message for his daughter? New York.—Yes, from Philadelphia; but it is too late to send it over the river to-night. I am all alone. The two boys are gone. Washington.—Very well, no matter. Baltimore.—Good night, I am going. Washington.—Good night all. Philadelphia.—Good night. New York.—Good night.

And so ends this curious scene; not an imaginary one, but one of actual occurrence. Let any one reflect upon the fact, that all these questions and answers occurred in a space of time but very little longer than that in which the unique drama has been related.

Rules of Politeness.

INTRODUCTIONS.—As a general rule, do not introduce a gentleman to a lady without first privately asking her permission.

In going through the ceremony of introducing, pronounce the name of the lady first, adding; "permit me to present to you Mr. ——."

In introducing two gentlemen, present the younger one to the elder, or the one of lower rank to the one of the higher. If the gentlemen are about the same age, and equal in society, present the stranger to the one with whom you are the most intimate. The best form of expression that can be used in introducing two gentlemen, who are in the same circle, is to say; "Mr. —— let me make you acquainted with Mr. ——." But if you are addressing an elderly gentleman, always say, "Mr. ——, permit me to present to you Mr. ——."

A lady should always be perfectly at her ease while introducing her friends to one another, as she has, while performing this necessary little ceremony, great opportunity of proving whether or not her manners are truly graceful.

It is not considered fashionable to introduce two persons who accidentally meet in your parlor, and who are paying you a morning visit. The object of this custom in France, (where it first arose,) was to prevent formality, as visitors were expected to converse together without an introduction, and were afterwards at liberty to recognize each other or not just as they pleased. It is, therefore, in good taste if you find your guests do not converse together, without an introduction to present them to one another.

Never introduce in the street, unless the third person joins and walks with you. You may make an exception to this rule when the parties are mutually desirious of knowing one another. If you are walking with one lady, do not stop to converse with others who are unknown to her, as she must necessarily feel unpleasant. If you are walking with a gentleman you may follow the bent of your inclination, for if he is well bred he will attend your pleasure without evincing either impatience or awkwardness.

A lady is at liberty to take either another lady or a gentleman to pay a morning visit to a friend, without asking permission: but she should never allow a gentleman the same liberty, if he desires to make any of his friends known to her, he must first ask if the acquaintance would be agreeable.

A lady who is invited to an evening assembly may always request a gentleman who has not been invited by the lady of the house, to accompany her.

Acquaintances made in travelling, or accidentally in public places, have no claim to more than a passing bow if you afterwards finds that the acquaintanceship is not particularly desirable.

When a gentleman is presented to a lady, if she is in her own house, and desires to welcome him, she may shake hands with him, but on any other occasion, unless the gentleman is venerable, or the bosom friend of the husband or father, this practice is reprehensible.

The same rule should be observed when a lady is introduced to a lady: although in this country the habit of shaking hands is very general.

In introducing a friend, be as cautious of saying too much in his favor, as too little, for if the introduced be really the possessor of very good qualities, they will soon be found out, and more appreciated than if they had in the first instance been all told.

At a large dinner or evening party, although some persons strictly adhere to the French custom of not introducing, the mistress of the house shows real politeness by presenting to one another those persons whom she thinks will assimilate in their dispositions. If there are strangers present, a party in America is apt to become formal through the omission of introductions; not so in Paris, where everybody converses with his neighbor without going through the unnecessary ceremony of a presentation.

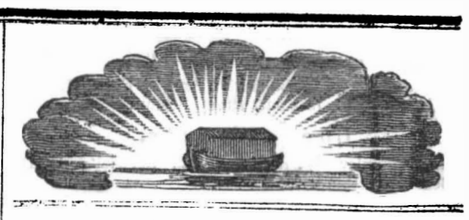
LOWELL CARPETS.—In the manufacture of carpets the English have greatly the advantage in the cost of stock, (working in a great proportion of ground rags, while ours are made entirely of unworn wool,) but they are *woven cheaper in Lowell than anywhere in Great Britain*, owing to a great Yankee improvement in machinery, though the girls who tend the carpet looms of Lowell (hard and difficult work) earn their dollar a day, which no carpet weaver in Great Britain can do. The cost of a good ingrain carpet at Lowell is 80 cents per yard against 67 in Leeds for what passes for a similar article, though the British is vastly inferior in strength and durability.

IRON WORKS AT SMITHVILLE, ME.—The Bangor Whig states that a thoroughly practical founder from Pennsylvania, has been at work for some time at Smithville in Prscataquis county for the purpose of testing the value of the iron ore in that vicinity. Under his direction about one hundred tons of pig iron have been made, and the quality of the iron proves to be equal to any in the country. There is a very large quantity of ore, sufficient to keep a furnace in blast for a century. The furnace will now be put in first rate working order, and in the course of a few weeks a regular business will be commenced, and carried on systematically, and it is generally supposed, quite profitable.

FIREWORKS.—The fire-works on Boston Common, on the 4th of July, (says the Times,) will close with a magnificent piece, one hundred feet in length, at the cost of $2000, representing the Castle of St. Juan D'Ulloa.

BLACK'S ROTARY ENGINE.—We have received from our Washington correspondent, a drawing and description of Mr. Black's new patent rotary steam engine, which will appear in our next.

An old amoroso said one day to a pretty little girl, 'I never see you, my dear, but I am a score of years the younger.' 'Then pray,' said she, 'let us not meet often, or you'll soon be in your second childhood.'



The Millerites.

Agreeable to our promise in our last number, we shall expose some of the principal peculiarities, opinions, and arguments of that class which is considered the main body of Millerites, or Adventists, and whose present views coincide with those of Mr. Miller himself. But in order to reach this subject it may be proper to notice briefly the opinions and expectations held by them in 1842 and '43. Mr. Miller—William Miller, of Low Hampton, N. Y., usually called "Father Miller," or "the prophet Miller,"—after several years' close attention and study of the bible, especially the prophetic scriptures, and also giving much attention to the subject of chronology, came to the conclusion, and by his arguments convinced many others, that the "two thousand and three hundred days," mentioned in the 8th chapter of Daniel, were to be understood as so many years, and that they commenced with the "going forth of the decree to restore and build Jerusalem," mentioned in the 9th chapter of Daniel, and that they extended to the end of the world, and would terminate in 1843. He was aware that there was a difference, amounting to four or five years, in the opinions of different popular chronologists, with regard to the date of the decree which was issued by Artaxerxes Longimanus, or Ahasureus, in the 7th year of his reign, and immediately before Ezra went up with his party to Jerusalem: but notwithstanding this disagreement of chronologers, Mr. Miller finding that the earliest date admitted by chronologists, would extend the period to 1843, he examined the chronology of other periods given to see if their termination would correspond with this. On examining the chronology of the world, (which it had been supposed by Iren as and several other early christians, would continue 6000 years from the creation, to the second coming of Christ, as typified by the six working days of the week) he satisfied himself that the world would be 6000 years old in '43, although he was aware that a large majority of those who had examined the subject had come to the conclusion that this period would terminate in '45 or '46. He also examined the period of 1335 days mentioned in Dan. 12: and measuring back that number of years, from 1843 to 508, he discovered from history that in that year the ascendency of Popery over Paganism was made peculiarly conspicuous by the success of the arms of the first catholic king, Clovis of France, which event Mr. Miller believed, corresponded with the phrase of the event with which the period should commence, as expressed in Dan. 12: 11, namely, the taking away of the daily, [daily or prevalent abomination, Paganism,] and the setting up of the abomination that maketh desolate, [Popery.] He also examined the other period, 1290 years, also mentioned in Dan. 12, as commencing with the same event, and found that at the termination of that period, 1798, the Pope of Rome was taken and imprisoned by the French—the same power that had set up the Papal authority. These, in connection with some other periods and events which appeared to correspond, induced confidence in Mr. Miller and his adherents, that 1843 was the "time appointed" for the great event. But before the close of the year 1843 the leading Millerites (or Adventists as they styled themselves) discovered that 2300 years from B.C. 457 (the supposed date of the decree of Artexerxes) could not terminate *within* the year A. D. 1843, but must extend as far into '44 as the decree was sequent to the commencement of B. C. 457. This circumstance led them to concentrate as much evidence as possible in support of the position that '44 was the true termination of the prophetic periods; and although they could not find in history, events whereby to reconcile the termination of the other periods with that of the 2300 years, yet they appeared to persuade themselves that this was immaterial, and fixed on the 10th day of the 7th month (Jewish time) the anniversary of the ancient Jubilee, as the very day in which they would see the Lord coming in the clouds of heaven.

(To be continued.)

NOBLE SENTIMENTS.—Lord Erskine was distinguished through life for independence of principle, for his scrupulous adherence to truth. He once explained the rules of his conduct, which ought to be deeply engraven on every heart. He said, 'It was a first command and counsel of my earliest youth, always to do what my conscience told me to be a duty, *and to leave the consequences to God*. I shall carry with me the memory, and I trust the practice of this paternal lesson, to the grave. I have hitherto followed it, and have no reason to complain that my obedience to it has been a temporal sacrifice. I have found it, on the contrary, the road to prosperity and wealth, and I shall point out the same path to my children for their pursuit.'

MORNING WALKING.—It is now the lovely month of June, and we recommend to all mechanics, mechanic's wives, and mechanic's children, whose business does not require their attention from four to five in the morning, to walk out in the sweet refreshing morning air. Nature is clothed in lovely verdure and gay flowers, disseminating perfumes to the morning breeze, which cannot fail to invigorate the mind, and produce grateful sensations, induce health and cheerfulness, and lay the founda tion of a clique of enjoyment through the day.—Try it for a few mornings at least.

MORE FANATICISM.—A colored man recently attempted to hang himself in Boston, giving as a reason, *a desire to see his Maker*. Would it not be good policy to suppress, as *incendiary*, all books which treat on the subject of future consciousness, to prevent such *pernicious efleets* among the people? Let the sensitive opponents of dangerous in cendiary doctrines answer.

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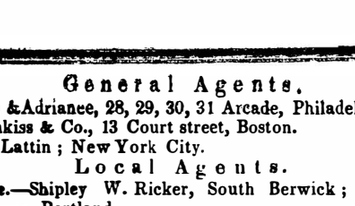

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The Galvanic Rings have been used with entire success in all cases of Rheumatism, acute or chronic, applying to the head, face or limbs ; gout, tic-doloreux, toothache, bronchitis, vertigo, nervous or sick headache, indigestion, paralysis, palsy, epilepsy, fits, cramp, palpitation of the heart, apoplexy, stiffness of joints, spinal complaints, lumbago, neuragia, nervous themors, dizziness of the head, pains in the chest and side, general debility deficiency of Nervous and physical energy, and all nervous disorders. In cases of confirmed dyspepsia, which is simply a nervous derangement of the nervous derangement of the digestive organs, they have been found equally successful. Their extraordinary effects upon the system must be witnessed to be believed, and as a certain preventive for the preceding complaints they are equally recommended. The Rings are of different prices, being made of all sizes, and of various ornamental patterns, and can be worn by the most delicate female without the slightest inconvenience. In fact, the sensation is rather agreeable than otherwise.

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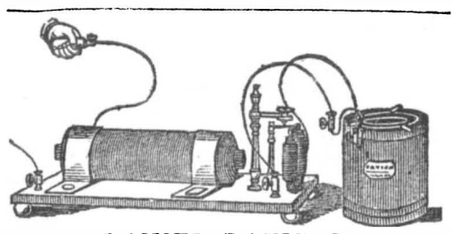

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PHRENOLOGY.

PROSPECTUS OF VOLUME IX., FOR 1847,
OF THE
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O. S. FOWLER—EDITOR.

To reform and perfect Man—to develope, by culture, the original beauties and capabilities of his nature—is a work the most arduous and exalted that can possibly engage human intellect or effort. To do this effectually, however, his nature must be known ; and since Phrenology and Physiology imbody his entire constitution, there is no way by which we can so easily become acquainted with ourselves, or for what occupation in life we are best qualified, as by the aid of these sciences.

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ILLUSTRATED BOTANY.
Edited by JOHN B. NEWMAN, M. D.

Circumstances make the man, and very often, as in the present case, the book. For years there has been a steadily increasing interest felt for the vegetable kingdom. Latterly this taste has been partially gratified by the literary magazines, which owe their popularity, in a great measure to the beautiful flower prints that adorn them. One specimen a month, however, is not enough, nor is it required in such connection. A work relating exclusively to the subject, is wanted by the public, and this want, the present enterprise is intended to supply.

Preceded by a short introduction on Physiology, and a view of the Natural and Linnæan Systems, the work will be devoted to a separate consideration of each plant.—Together with our own information, we shall draw on the standard works on Chemistry, Botany, and Medicine, combining every useful item of knowledge, and without lessening its value, present it in a concise and pleasing form. Obtaining our supplies from the same sources as the bee, we hope to *secrete* as elegant a sweet for the mind, as it does for the body. The properties of each, more especially the medicinal, will be confirmed, in a great number of instances, by personal experience. To this will be added its history; its meaning in the language of flowers ; and poetry, either original or selected from the gems of the children of song.

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We do not intend to confine ourselves to the botanical descriptions of each plant, but on the contrary, divested of technicality, intend to make it a thoroughly scientific work, in all the departments of Botany. It will also give information on the cultivation of Plants and Flowers. In a word, it will comprise the whole science.

We give below the *free* opinions of the press.

From the N.Y. Tribune.

☞ "ILLUSTRATED BOTANY."—This is a new candidate for popular favor, in the shape of a monthly periodical. The first two numbers are before us, and if they may be regarded as specimens of those which are to follow, the work will certainly prove highly attractive. It is to be devoted to a separate consideration of each plant in the vegetable kingdom, the whole illustrated by colored engravings, taken from nature, full size, and finished in the highest style of modern art. Four or six of these engravings will be given in each number. Those in the numbers already issued are of the most beautiful and splendid description. The Editor will draw on the standard works on chemistry, botany, and medicine, and thus combine in a brief form every useful item of knowledge respecting plants and flowers, their medicinal qualities, &c. To this will be added their history and their meaning in the "language of flowers." To all lovers of the beautiful in Nature and Art, we commend this work as eminently worthy of patronage.

From the Christian Advocate and Journal, (Edited by T. E. Bond, M. D,)

The painted specimens are really exquisitely done ; and the great marvel with us is, how the work can be afforded at the low price of three dollars per annum, or two copies to an address for five dollars. Engravings can be cheaply multiplied, but paintings must be executed separately, and without the aid of labor-saving machinery. It will give us real pleasure to announce the successive numbers of this beautiful periodical, as we have been led to think the study of Botany not only as an innocent recreation, but eminently promotive of piety.

From the N. Y. Surgical and Medical Reporter.

We have received the first number of "The Illustrated Botany." This periodical is got up in a very neat form, and displays taste and judgment in its Editor, who, being a well educated medical man, is prepared to make a work of this kind very interesting and useful to the general

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Indian Pudding,	6d	Apple Pie,	6d
Rice Pudding,	6d	Peach Pie,	6d
Plum Pudding,	6d	lum Pie,	6d
Bread Pudding,	6d	u mpkin Pie,	6d
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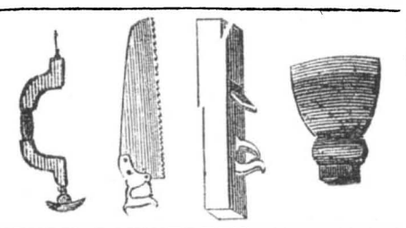

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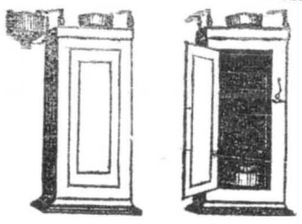

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